### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-027234 Address: 333 Burma Road **Date Inspected:** 24-Feb-2012

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: L & M Industrial Fabrication **Location:** Tangent, Oregon

**CWI Name: CWI Present:** Yes Tom Drever No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower Chimney Parapet

## **Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived at L & M Industrial Fabricators between the times noted above to randomly observe Quality Control (QC) personnel monitor the welding operations performed by L & M personnel on the fabrication of tower chimney parapet walls. The following observations for the extra work being performed to the following contract change order were:

CCO: 196 - Description: Construct parapet walls at the Tower Heads

### East Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder Bradford Schroyer (Welder ID #16) performing the complete-joint-penetration (CJP) corner-joint groove weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3G) vertical position connecting wall plate- (A11b) to base plate- (A11a) of the East Tower Head Chimney parapet wall. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the CJP corner-joint groove weld operation, that the minimum preheat temperature as per the approved WPS was established and afterwords; verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-TC-U4b-GF-3G using Hobart Excel Arc E71T-1 (.052") diameter electrode.

The welding operation was completed at this location and the workmanship on this date appeared to be in general compliance with the contract specifications.

West Tower Chimney Parapet:

# WELDING INSPECTION REPORT

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This QA Inspector randomly observed L & M welder Jake Schuld (Welder ID #17) performing the complete-joint-penetration (CJP) corner-joint groove weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3G) vertical position connecting wall plate- (A11b) to base plate- (A11a) of the West Tower Head Chimney parapet wall. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the CJP corner-joint groove weld operation, that the minimum preheat temperature as per the approved WPS was established and afterwords; verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-TC-U4b-GF-3G using Hobart Excel Arc E71T-1 (.052") diameter electrode.

The welding operation was completed at this location and the workmanship on this date appeared to be in general compliance with the contract specifications.

### East Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder Bradford Schroyer (Welder ID #16) performing the complete-joint-penetration (CJP) corner-joint groove weld operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (3G) vertical position connecting wall plate- (A12b) to base plate- (A12a) of the East Tower Head Chimney parapet wall. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the CJP corner-joint groove weld operation, that the minimum preheat temperature as per the approved WPS was established and afterwords; verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-TC-U4b-GF-3G using Hobart Excel Arc E71T-1 (.052") diameter electrode.

The welding operation was in-process at this location and the workmanship on this date appeared to be in general compliance with the contract specifications.





#### **Summary of Conversations:**

Only general conversations between QA and QC.

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

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**Inspected By:** Peterson,Art Quality Assurance Inspector **Reviewed By:** Levell,Bill QA Reviewer